

Marlene H. Dortch, Secretary
Federal Communications Commission
445 Twelfth Street, S.W.
Washington, D.C. 20554

*Re: Revision of Part 15 of the Commission's Rules to Permit Unlicensed
National Information Infrastructure (U-NII) Devices in the 5 GHz Band,
ET Docket No. 13-49*

Comments in Support of Petition for Reconsideration of WISPA, Cambium, Mimosa Networks and JAB

Dear Ms. Dortch,

Thank you very much for your attention to this very important matter. We will continue to be engaged on this issue and will report back to the membership with any further requests for action or details. See the Points to Make below:

Points to Make
ET Docket No. 13-49

Background

1. **FCC Order of April 1 preserved unlimited gain antennas for point-to-point use in 5725-5850 MHz band, but eliminated ability of devices to continue to be certified under Section 15.247. After two years, no more Section 15.247 equipment will be sold. All new equipment must be certified under Section 15.407.**
1. **Petitions for reconsideration filed on June 2, 2014 by WISPA, Cambium Networks, Mimosa Networks and JAB Wireless**
 1. almost all WISPs (and other industries as well) use Section 15.247 equipment in this band for long-distance *point-to-point* backhaul and most also use the band for *point-to-multipoint* communications (that includes a point-to-point uplink) to deliver broadband to distant end-users in *rural areas*
 - i. other backhaul technologies not available or not affordable
 - ii. *only* unlicensed band that allows unlimited gain antennas for point-to-point use
 1. all petitioners expressed similar concerns about effect of FCC rule change requiring equipment to be certified under the more restrictive out-of-band emission (OOBE) requirements of Section 15.407

Points to Emphasize

1. **FCC underestimated what the impact of allowing only tight OOBE equipment would be on device performance and cost and how that would negatively affect the ability of rural Americans to receive broadband [and VoIP] service**
 1. *two ways to comply with tighter OOBE requirements, both are unacceptable:*
 - i. reducing transmit power or antenna gain which drastically *reduces link distance* [Cambium and JAB presented report that showed 65% loss]
 - ii. incorporating new filtering *adds \$300 to price of a \$249 radio, and also reduces useable portion of band from 125 MHz to 45 MHz*
 1. allows only two 20-MHz sectors instead of four in a typical configuration

1. to compensate, WISPs would need to add *significantly more infrastructure* at great cost in areas where towers may not be available
2. on existing towers, the number of available channels (sectors) that could be co-located would be significantly reduced while simultaneously, the distance and the number of customers that each sector could cover would be substantially less.
3. **PROVIDE SPECIFIC COST INFORMATION – equipment, tower lease fees, lost income**
2. **There is no evidence of interference to TDWRs or to any other service ever being caused by OOBE from legally operating Section 15.247 equipment**
 1. TDWR facilities are at least 75 MHz away therefore they were never affected by OOBE from Section 15.247 equipment.
 2. FCC's new security software rules should address interference problems that might arise from illegal use of equipment.
 3. **LIMITING OUT-OF-BAND EMISSIONS WILL NOT ALLEVIATE A PROBLEM CAUSED BY SECTION 15.247 OR SECTION 15.407 EQUIPMENT BEING ILLEGALLY MODIFIED TO OPERATE IN A FREQUENCY RANGE (USUALLY 5600-5650 MHZ) WHERE IT HAS NOT BEEN CERTIFIED**

BOTTOM LINE: Eliminating the flexibility to allow devices to continue to be certified under Section 15.247 was entirely unnecessary and will significantly harm ability of many rural WISP customers to continue to receive broadband and voice services

In our business, we have approximately 700 customers in rural area's using **Section 15.247** devices, along with all of our backhauled. This would effectively eliminate our ability to provide high speed broadband access to 7 rural communities, and vastly limit our ability to provide high speed broadband access in and around our city.

Please consider the ramifications this presents in our ability to assist rural America with high speed broadband access. For many people, this is their most convenient way to shop for goods, order prescriptions, pay their bills, and stay in contact with friends and family members. These communities don't have access to DSL, or 4G LTE access.

Respectfully,

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